DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Arnold Schwarzenegger, Governor

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013122 Address: 333 Burma Road **Date Inspected:** 13-Apr-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang and Wu Zhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 7AE to 7BE (T- Ribs to T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for T-Ribs to T-Ribs for the Transverse Segment Splice at Bottom Panel (Partial Bolts Installed), Side Panel (Cross Beam and Bike Path Side) at Panel Point (PP) 49 and PP 50 for Segment 7AE to 7BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00319 Dated April 13, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220018 and final torque required was 447 N-m

Bolt sizes used were M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m

Manual Torque wrench was been used with Sr. No. XQ2-666. Please refer the pictures attached for more comprehensive details.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Note: At Bottom Panel for Segment 7AE at PP 49 T-Ribs bolts 2 Columns and 5 Rows bolts not installed as it will be interfere with the Temporary Sea Fasteners which are to be installed during transportation/shipment.

Segment 7CW (T- Ribs Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel, Side Panel (Cross Beam and Bike Path Side) T-ribs to the Floor Beam at Panel Point (PP) 53, PP 54 and PP 55 for Segment 7CW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00319 Dated April 13, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 7DW (T- Ribs Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel, Side Panel (Cross Beam and Bike Path Side) T-ribs to the Floor Beam at Panel Point (PP) 56, PP 57 and PP 58 for Segment 7DW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00319 Dated April 13, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114. Please refer the pictures attached for more comprehensive details.

Segment 7EW (T- Ribs Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel, Side Panel (Cross Beam and Bike Path Side) T-ribs to the Floor Beam at Panel Point (PP) 59 and PP 60 for Segment 7EW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00319 Dated April 13, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m and

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 7AE

This QA Inspector performed Inspection along with Caltrans QA Mr. Manikandan for the following Segment 7AE from Panel Point 49.

Deck Panel Diaphragm to Deck Panel Plumbness measurement performed from East side and the Flatness measurement not performed as no accessibility (due to no scaffolding).

Segment 7AE

This QA Inspector performed Inspection along with Caltrans QA Mr. Manikandan for the following Segment 7AE from Panel Point (PP) 49 and PP 50.

Floor Beam Offset measurement performed for Cross Beam and Bike Path side. The measured readings were submitted to Engineer and Team Leader for further action.

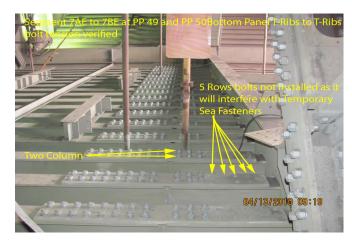
Segment 7BE

This QA Inspector performed Inspection along with Caltrans QA Mr. Manikandan for the following Segment 7AE from Panel Point (PP) 51, PP 52 and PP 53.

Floor Beam Offset measurement performed for Cross Beam and Bike Path side. The measured readings were submitted to Engineer and Team Leader for further action.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer